AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1   1.   (Currently Amended) A method executed by a computer of determining a desired

2   product corresponding to a user objective, comprising the steps of:

3   providing a first ~~said~~ user objective and a second user objective;

4   providing a first set of input data selected from one or both of wellbore data and

5   reservoir data, and providing a second set of input data selected from one or both of wellbore

6   data and reservoir data;

7   automatically generating a first workflow in response to the first user objective, and

8   automatically generating a second workflow in response to the second user objective;

9   automatically selecting a first subset of software modules of a first tool and a second

10   subset of software modules of a second tool in response to the first workflow, wherein the first

11   subset corresponds to a first path in the first tool that defines a first order of execution of the

12   software modules in the first subset, and wherein the second subset corresponds to a second

13   path in the second tool that defines a second order of execution of the software modules in the

14   second subset;

15   automatically selecting a third subset of software modules of the first tool and a fourth

16   subset of software modules of the second tool in response to said second workflow, wherein the

17   third subset is different from the first subset, and the fourth subset is different from the second

18   subset, wherein the third subset corresponds to a third path in the first tool that defines a third

19   order of execution of the software modules in the third subset, wherein the third path is

20   different from the first path, wherein the fourth subset corresponds to a fourth path in the

21   second tool that defines a fourth order of execution of the software modules in the fourth

22   subset, and wherein the fourth path is different from the second path;

23   executing ~~one or more~~ the software modules of the first subset according to the first

24   path on a processor in response to said first set of input data;

25   executing ~~one or more~~ the software modules of the second subset according to the

26   second path on said processor in response to output from the ~~one or more~~ software modules of

27   the first subset;[[and]]

28   executing the software modules in the third subset according to the third path on said

29   processor in response to said second set of input data;

30   executing the software modules in the fourth subset according to the fourth path on said

31   processor in response to output from the software modules of the third subset;

32   determining a first said desired product in response to at least executing the software

33   modules of the first and second subsets, wherein the first said desired product includes a model

34   of a reservoir to be produced by a well; and

35   determining a second said desired product in response to at least executing the software

36   modules of the third and fourth subsets, wherein the second said desired product includes

37   another model of the reservoir.

1   2.   (Cancelled)

1   3.   (Currently Amended) A computer-readable medium readable by a computer tangibly

2   embodying a set of instructions executable by said computer to perform method steps for

3   determining a desired product corresponding to a user objective, said method steps comprising:

4   receiving a first ~~said~~ user objective and a second user objective;

5   receiving a first set of input data selected from one or both of wellbore data and

6   reservoir data, and receiving a second set of input data selected from one or both of wellbore

7   data and reservoir data;

8   automatically generating a first workflow in response to the first user objective, and

9   automatically generating a second workflow in response to the second user objective;

10   automatically selecting a first subset of software modules of a first tool and a second

11 subset of software modules of a second tool in response to the first workflow, wherein the first

12 subset corresponds to a first path in the first tool that defines a first order of execution of the

13 software modules in the first subset, and wherein the second subset corresponds to a second

14 path in the second tool that defines a second order of execution of the software modules in the

15 second subset;

16   automatically selecting a third subset of software modules of the first tool and a fourth

17 subset of software modules of the second tool in response to said second workflow, wherein the

18 third subset is different from the first subset, and the fourth subset is different from the second

19 subset, wherein the third subset corresponds to a third path in the first tool that defines a third

20 order of execution of the software modules in the third subset, wherein the third path is

21 different from the first path, wherein the fourth subset corresponds to a fourth path in the

22 second tool that defines a fourth order of execution of the software modules in the fourth

23 subset, and wherein the fourth path is different from the second path;

24   executing ~~one or more~~ the software modules in the first subset according to the first

25 path on a processor in response to said first set of input data;

26   executing ~~one or more~~ the software modules of the second subset according to the

27 second path on said processor in response to output from the ~~one or more~~ software modules of

28 the first subset;[[and]]

29   executing the software modules in the third subset according to the third path on said

30 processor in response to said second set of input data;

31   executing the software modules in the fourth subset according to the fourth path on said

32   processor in response to output from the software modules of the third subset;

33   determining a first said desired product in response to at least executing the software

34   modules of the first and second subsets, wherein the first said desired product includes a model

35   of a reservoir to be produced by a well; and

36   determining a second said desired product in response to at least executing the software

37   modules of the third and fourth subsets, wherein the second said desired product includes

38   another model of the reservoir.

1   4.   (Cancelled)

1   5.   (Currently Amended) A system responsive to a set of input data and a user objective for

2   generating a desired product corresponding to said user objective, comprising:

3   first apparatus for receiving a first said user objective and a first set of input data

4   selected from one or both of wellbore data and reservoir data, and for receiving a second user

5   objective and a second set of input data selected from one or both of wellbore data and

6   reservoir data;

7   second apparatus for automatically generating a first workflow in response to the first

8   user objective, and automatically generating a second workflow in response to the second user

9   objective;

10   third apparatus for automatically selecting a first subset of software modules of a first

11   tool and a second subset of software modules of a second tool in response to the first workflow,

12   and automatically selecting a third subset of software modules of the first tool and a fourth

13   subset of software modules of the second tool in response to said second workflow, wherein the

14   third subset is different from the first subset, and the fourth subset is different from the second

15   subset, wherein the first subset corresponds to a first path in the first tool that defines a first

16   order of execution of the software modules in the first subset, the second subset corresponds to

17   a second path in the second tool that defines a second order of execution of the software

18   modules in the second subset, the third subset corresponds to a third path in the first tool that

19   defines a third order of execution of the software modules in the third subset, and the fourth

20   subset corresponds to a fourth path in the second tool that defines a fourth order of execution of

21   the software modules in the fourth subset, where the third path is different from the first path,

22   and the fourth path is different from the second path; and

23   processor apparatus for automatically executing ~~one or more~~ the software modules of

24   the first subset according to the first path in response to said first set of input data, executing

25   ~~one or more~~ the software modules of the second subset according to the second path in

26   response to output from the ~~one or more~~ software modules of the first subset, executing the

27   software modules of the third subset according to the third path in response to said second set

28   of input data, executing the software modules in the fourth subset according to the fourth path

29   in response to output from the software modules of the third subset,[[and]] generating a first

30   said desired product in response to at least execution of the software modules of the first and

31   second subsets, and generating a second said desired product in response to at least execution

32   of the software modules of the third and fourth subsets, wherein the first said desired product

33   includes a model of a reservoir to be produced by a well, and wherein the second said desired

34   product includes another model of the reservoir.

1   6.   (Cancelled)

1   7.   (Currently Amended) A method executed by a computer for determining a final product

2   in response to a user objective, comprising the steps of:

3   providing [[said]]a first user objective and providing first input data selected from one

4   or both of wellbore data and reservoir data, and providing a second user objective and

5   providing second input data selected from one or both of wellbore data and reservoir data;

6   generating a ~~specific~~first workflow corresponding to said first user objective, and

7   generating a second workflow corresponding to said second user objective;

8   selecting a plurality of software modules in response to said ~~specific~~first workflow,

9   said plurality of software modules including a first subset of software modules having a first

10   predetermined sequence, and a second subset of software modules having a second

11   predetermined sequence, wherein the software modules of the first subset are part of a first tool,

12   and the software modules of the second subset are part of a second tool;

13   selecting a different plurality of software modules in response to said second workflow,

14   said different plurality of software modules including a third subset of software modules having

15   a third predetermined sequence, and a fourth subset of software modules having a fourth

16   predetermined sequence, wherein the software modules of the third subset are part of the first

17   tool, the software modules of the fourth subset are part of the second tool, wherein the third

18   predetermined sequence is different from the first predetermined sequence, and the fourth

19   predetermined sequence is different from the second predetermined sequence;

20   executing said software modules of the first subset in said first predetermined sequence

21   in response to said first input data;

22   executing said software modules of the second subset in said second predetermined

23   sequence in response to output of the first subset of software modules;[[and]]

24   executing said software modules of the third subset in said third predetermined

25   sequence in response to said second input data;

26   executing said software modules of the fourth subset in said fourth predetermined

27   sequence in response to output of the third subset of software modules;

28   generating [[said]]a first final product when the execution of said ~~plurality~~first and

29   second subsets of software modules is complete, wherein said first final product includes a

30   model of a reservoir to be produced by a well; and

31   generating a second final product when the execution of said third and fourth subsets of

32   said software modules is complete, wherein said second final product includes another model

33   of the reservoir.

8.   (Cancelled)

1   9.   (Currently Amended) The method of claim 7, wherein executing said first subset of

2   software modules in said first predetermined sequence in response to said first input data

3   generates first conditioned data; [[and]]wherein executing said third subset of software

4   modules in said third predetermined sequence in response to said second input data generates

5   second conditioned data; wherein executing said second subset of software modules in said

6   second predetermined sequence is in response to said first conditioned data; wherein executing

7   said fourth subset of software modules in said fourth predetermined sequence is in response to

8   said second conditioned data, said first final product being generated when the execution of

9   said second subset of software modules in said second predetermined sequence is complete,

10   and said second final product being generated when the execution of said fourth subset of

11   software modules in said fourth predetermined sequence is complete.

1   10.   (Currently Amended) A computer-readable medium readable by a computer tangibly

2   embodying a set of instructions executable by the computer to perform method steps for

3   determining a final product in response to a user objective, said method steps comprising:

4   providing [[said]]a first user objective and providing first input data selected from one

5   or both of wellbore data and reservoir data, and providing a second user objective and

6   providing second input data selected from one or both of wellbore data and reservoir data;

7   generating a specificfirst workflow corresponding to said first user objective, and

8   generating a second workflow corresponding to said second user objective;

9   selecting a plurality of software modules in response to said specificfirst workflow,

10   said plurality of software modules including a first subset of software modules having a first

11   predetermined sequence, and a second subset of software modules having a second

12   predetermined sequence, wherein the software modules of the first subset are part of a first tool,

13   and the software modules of the second subset are part of a second tool;

14   selecting a different plurality of software modules in response to said second workflow,

15   said different plurality of software modules including a third subset of software modules having

16   a third predetermined sequence, and a fourth subset of software modules having a fourth

17   predetermined sequence, wherein the software modules of the third subset are part of the first

18   tool, the software modules of the fourth subset are part of the second tool, wherein the third

19   predetermined sequence is different from the first predetermined sequence, and the fourth

20   predetermined sequence is different from the second predetermined sequence;

21   executing said software modules of the first subset in said first predetermined sequence

22   in response to said first input data;

23   executing said software modules of the second subset in said second predetermined

24   sequence in response to output of the first subset of software modules;[[and]]

25   executing said software modules of the third subset in said third predetermined

26   sequence in response to said second input data;

27   executing said software modules of the fourth subset in said fourth predetermined

28   sequence in response to output of the third subset of software modules;

29   generating [[said]]a first final product when the execution of said pluralityfirst and

30   second subsets of software modules is complete, wherein said first final product includes a

31   model of a reservoir to be produced by a well; and

32   generating a second final product when the execution of said third and fourth subsets of

33   said software modules is complete, wherein said second final product includes another model

34   of the reservoir.

11.   (Cancelled)

1   12.   (Currently Amended) The computer-readable medium of claim 10, wherein executing

2   said first subset of software modules in said first predetermined sequence in response to said

3   first input data generates first conditioned data; wherein executing said third subset of software

4   modules in said third predetermined sequence in response to said second input data generates

5   second conditioned data;[[and]] wherein executing said second subset of software modules in

6   said second predetermined sequence is in response to said first conditioned data; wherein

7   executing said fourth subset of software modules in said fourth predetermined sequence is in

8   response to said second conditioned data, said first final product being generated when the

9   execution of said second subset of software modules in said second predetermined sequence is

10   complete , and said second final product being generated when the execution of said fourth

11   subset of software modules in said fourth predetermined sequence is complete.

1   13.   (Currently Amended) A system for determining a final product in response to a user

2   objective, comprising:

3   first apparatus for receiving [[said]]a first user objective and receiving first input data

4   selected from one or both of wellbore data and reservoir data, and for receiving a second user

5   objective and receiving second input data selected from one or both of wellbore data and

6   reservoir data;

7   second apparatus for generating a specificfirst workflow corresponding to said first user

8   objective, and for generating a second workflow corresponding to said second user objective;

9   third apparatus for selecting a plurality of software modules in response to said

10   specificfirst workflow, said plurality of software modules including a first subset of software

11   modules having a first predetermined sequence, and a second subset of software modules

12   having a second predetermined sequence, wherein the software modules of the first subset are

13   part of a first tool, and the software modules of the second subset are part of a second tool; and

14   for selecting a different plurality of software modules in response to said second workflow, said

15   different plurality of software modules including a third subset of software modules having a

16   third predetermined sequence, and a fourth subset of software modules having a fourth

17   predetermined sequence, wherein the software modules of the third subset are part of the first

18   tool, and the software modules of the fourth subset are part of the second tool, and wherein the

19   third predetermined sequence is different from the first predetermined sequence, and the fourth

20   predetermined sequence is different from the second predetermined sequence;

21   fourth apparatus for executing said software modules of the first subset in said first

22   predetermined sequence in response to said first input data, [[and]]executing said software

23   modules of the second subset in said second predetermined sequence in response to output of

24   the first subset of software modules, executing said software modules of the third subset in said

25   third predetermined sequence in response to said second input data, and executing said software

26   modules of the fourth subset in said fourth predetermined sequence in response to output of the

27   third subset of software modules; and

28   fifth apparatus for generating saida first final product when the execution of said

29   pluralityfirst and second subsets of software modules is complete, and generating a second final

30   product when the execution of said third and fourth subsets of software modules is complete,

31   wherein said first final product includes a model of a reservoir to be produced by a well, and

32   wherein said second final product includes another model of the reservoir.

14.   (Cancelled)

1   15.   (Currently Amended) The system of claim 13, wherein the fourth apparatus for

2   executing said first subset of software modules in said first predetermined sequence in response

3   to said first input data generates first conditioned data; [[and]]the fourth apparatus for

4   executing said third subset of software modules in said third predetermined sequence in

5   response to said second input data generates second condition data; the fourth apparatus for

6   executing said second subset of software modules in said second predetermined sequence is in

7   response to said first conditioned data; and the fourth apparatus for executing said fourth subset

8   of software modules in said fourth predetermined sequence is in response to said second

9   condition data, said first final product being generated when the execution of said second

10   subset of software modules in said second predetermined sequence is complete and said second

11   final product being generated when the execution of said fourth subset of software modules in

12   said fourth predetermined sequence is complete.

1   16.   (Currently Amended) The method of claim 1, wherein executing the ~~one or more~~

2   software modules of the first subset causes conditioning of the <u>first set of</u> input data to provide

3   [[the]]output that includes conditioned input data.

1   17.   (Currently Amended) The method of claim 16, wherein conditioning the <u>first set of</u>

2   input data includes interpreting the <u>first set of</u> input data.

1   18.   (Currently Amended) The method of claim 1, further comprising using the reservoir

2   ~~model~~<u>models</u> to predict performance of producing from the reservoir.

1   19.   (Currently Amended) The computer-readable medium of claim 3, wherein executing the

2   ~~one or more~~ software modules of the first subset causes conditioning of the <u>first set of</u> input

3   data to provide [[the]]output that includes conditioned input data.

1   20.   (Currently Amended) The computer-readable medium of claim 19, wherein

2   conditioning the <u>first set of</u> input data includes interpreting the <u>first set of</u> input data.

1   21.   (Currently Amended) The computer-readable medium of claim 3, further comprising

2   using the reservoir ~~model~~<u>models</u> to predict performance of producing from the reservoir.

1   22.   (Currently Amended) The system of claim 5, wherein executing the ~~one or more~~

2   software modules of the first subset causes conditioning of the <u>first set of</u> input data to provide

3   [[the]]output that includes conditioned input data.

1   23.   (Currently Amended) The system of claim 22, wherein conditioning the <u>first set of</u> input

2   data includes interpreting the <u>first set of</u> input data.

1   24.   (Currently Amended) The system of claim 5, wherein the processor apparatus is to

2   further use the reservoir ~~model~~<u>models</u> to predict performance of producing from the reservoir.

1   25.   (Currently Amended) The method of claim 7, wherein executing the first subset of

2   software modules causes conditioning of the <u>first</u> input data to provide [[the]]output that

3   includes conditioned input data.

1   26.   (Currently Amended) The method of claim 25, wherein conditioning the <u>first</u> input data

2   includes interpreting the <u>first</u> input data.

1   27.   (Currently Amended) The method of claim 7, further comprising using the reservoir

2   ~~model~~<u>models</u> to predict performance of producing from the reservoir.

1   28.   (Currently Amended) The computer-readable medium of claim 10, wherein executing

2   the first subset of software modules causes conditioning of the <u>first</u> input data to provide [[the

3   ]]output that includes conditioned input data.

1   29.   (Currently Amended) The computer-readable medium of claim 28, wherein

2   conditioning the <u>first</u> input data includes interpreting the <u>first</u> input data.

1   30.   (Currently Amended) The computer-readable medium of claim 10, wherein the method

2   steps further comprise using the reservoir ~~model~~<u>models</u> to predict performance of producing

3   from the reservoir.

1   31.   (Currently Amended) The system of claim 13, wherein executing the first subset of

2   software modules causes conditioning of the <u>first</u> input data to provide [[the]]output that

3   includes conditioned input data.

1   32.   (Currently Amended) The system of claim 31, wherein conditioning the <u>first</u> input data

2   includes interpreting the <u>first</u> input data.

1   33.   (Currently Amended) The system of claim 13, further comprising a sixth apparatus to

2   use the reservoir ~~model~~<u>models</u> to predict performance of producing from the reservoir.